Amendments to the Claims:

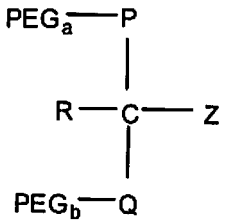
The following listing reflects amendments to the claims and replaces all prior versions and listings of claims in this application.

1-77. Canceled

78. (Currently Amended) A method for preparing a purified polymer, said method comprising the steps of:

providing an impure polymer composition comprising

(i) a branched water-soluble polymer having the structure:



where R is a non-reactive moiety, Z is a moiety comprising a site suitable for interacting with ion exchange chromatography media, PEG_a and PEG_b are each independently an end-capped polyethylene glycol (PEG), and P and Q each comprise a non-reactive linker absent an aromatic ring or ester group, and

(ii) one or more polymeric impurities selected from the group consisting of PEG diol, ~~end capped~~ end-capped PEG-OH, and activated end-capped PEG, and

purifying said impure polymer composition by ion exchange chromatography under conditions effective to essentially remove said polymeric impurities and thereby provide said branched water-soluble polymer in essentially pure form.

79. (Currently Amended) The method of claim 78, wherein PEG_a and PEG_b are each end-capped with a ~~said end-capping group is~~ methyl group , ~~and~~ said ~~polymeric impurities are selected from the group consisting of PEG diol,~~ end-capped PEG-OH is methoxy-PEG-OH, and said activated end-capped PEG is activated methoxy-PEG.

80. (Previously Presented) The method of claim 78, wherein prior to said providing, said method comprises identifying said one or more polymeric impurities in said composition.

81. (Previously Presented) The method of claim 78, wherein said site suitable for interacting with ion exchange chromatography media is selected from the group consisting of carboxyl, hydroxyl, and amino.

82. (Previously Presented) The method of claim 81, wherein said site suitable for interacting with ion exchange chromatography media is carboxyl.

83. (Previously Presented) The method of claim 78, wherein said purifying further comprises:

loading the impure polymer composition onto an ion exchange chromatography medium to provide a loaded medium,

washing the polymeric impurities from said loaded medium using an aqueous eluent under conditions effective to elute said impurities from said medium,

adjusting the conditions of the aqueous eluent to effect elution of said branched water-soluble polymer from the medium, and

eluting said branched water-soluble polymer from said medium to provide an aqueous solution comprising said branched water-soluble polymer in essentially pure form.

84. (Previously Presented) The method of claim 83, further comprising recovering said purified branched water-soluble polymer from said aqueous solution.

85. (Previously Presented) The method of claim 78, wherein said branched water soluble polymer has a molecular weight ranging from about 10,000 daltons to about 50,000 daltons.

86. (Currently Amended) The method of claim 83, wherein $\underline{PEG_a}$ and $\underline{PEG_b}$ are each end-capped with a ~~said end-capping group is~~ methyl group, ~~and~~ said ~~polymeric~~

~~impurities are selected from the group consisting of PEG diol,~~ end-capped PEG-OH is methoxy-PEG-OH, and said activated end-capped PEG is activated methoxy-PEG.

87. (Previously Presented) The method of claim 86, wherein said branched water-soluble polymer has a molecular weight ranging from about 100 to about 100,000 daltons.

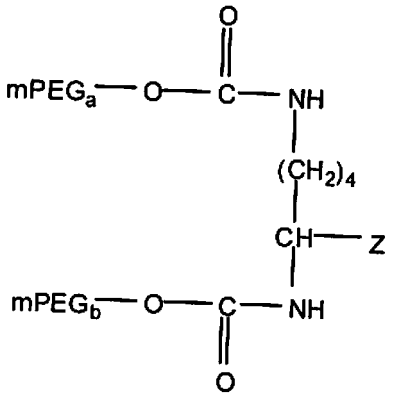
88. (Currently Amended) The method of claim 86, wherein said ~~activated end-capped PEG~~ activated methoxy-PEG comprises an electrophilic activating group.

89. (Currently Amended) The method of claim 88, wherein said ~~activated end-capped PEG~~ electrophilic activating group is ~~comprises~~ an active ester activating group.

90. (Previously Presented) The method of claim 86, wherein said adjusting step comprises adjusting the pH of the aqueous eluent.

91. (Previously Presented) The method of claim 86, wherein said adjusting step comprises adjusting the salt concentration of the eluent.

92. (Previously Presented) The method of claim 86, wherein said branched water-soluble polymer has the structure:



and $mPEG_a$ and $mPEG_b$ are each independently a monomethoxy polyethylene glycol.

93. (Previously Presented) The method of claim 78, wherein said polymeric impurities further comprise a mono-substituted PEG intermediate.

94. Canceled.

95. Canceled.

96. (Previously Presented) A branched water-soluble polymer purified by the method of claim 78.

97. (Previously Presented) The method of claim 78, wherein P and Q are the same or different.

98. (Previously Presented) The method of claim 78, wherein Z comprises a single site suitable for interacting with ion exchange chromatography media.

99. (Previously Presented) The method of claim 92, wherein said polymeric impurities further comprise monomethoxy polyethylene glycol mono-substituted lysine.